

**AMENDMENTS TO THE ABSTRACT**

Please substitute the following paragraph(s) for the abstract now appearing in the currently filed specification:

A waveguide conversion device including a rectangular waveguide connected to a circular waveguide, and an unnecessary-wave suppression groove provided at a mode conversion part between the rectangular waveguide and the circular waveguide. The unnecessary-wave suppression groove prevents an unnecessary transmission mode from being excited at the mode conversion part between the rectangular waveguide and the circular waveguide.